

## **Product Evaluation**

EC104 | 0917

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** EC-104 **Effective Date:** September 1, 2017

**Reevaluation Date:** September 2021

**Product Name:** Light Weight Manufactured Stone

Manufacturer: NevilStone

11588 Wild Rose Lane

Anna, TX 75409 (972) 924-2159

## **General Description:**

Light Weight Manufactured Stone are precast Portland cement lightweight concrete products that resemble natural stone in color and in texture. The stone products are used as non-loadbearing exterior veneer.

**Limitations:** 

Design Pressure: +46.7 psf / -73.3 psf

Wall Bracing: The light weight manufactured stone is not to be used as wall bracing.

## Installation:

## **General Installation Requirements:**

The stone must be installed in accordance with the manufacturer's installation instructions and this product evaluation report. Where differences between the manufacturer's installation instructions and this evaluation report occur, this evaluation report must be followed.

All fasteners must be corrosion resistant in accordance with IRC, IBC, and TDI requirements.

**Wall studs and framing:** Wall framing must be capable of resisting the design loads specified. Wall framing members must be minimum nominal 2x4 Spruce-Pine-Fir dimension lumber. Space the wall framing members a maximum of 16" on center.

**Wall Sheathing:** The exterior surface of the wall framing must be sheathed with wood structural panels (either minimum 1/2" plywood or minimum 7/16" OSB).

**Water-Resistive Barrier:** Install a water-resistive barrier (WSB) over the wall sheathing in accordance with either Section R703.6.3 of the IRC or Sections 1404.2 and 2510.6 of the IBC.

**Stone:** The light weight manufactured stone has an average thickness of 1-3/4". The stone is molded with a flat surfaced back.

**Lathe:** The lathe must be minimum  $2.5 \text{lb/yd}^2$  corrosion resistant diamond mesh conforming to ASTM C847. The lathe is to be installed over the water-resistive barrier oriented with cups up to retain the mortar. The lathe is secured to the wall studs with minimum 16-gauge corrosion resistant staples with a crown width of 15/16" and a sufficient length to penetrate into the wall studs a minimum of 3/4". The staples must be spaced a maximum of 6" on center.

**Stone Installation:** Using a notched trowel, a Type S mortar is applied with horizontal grooves as a scratch coat over the lathe to an average thickness of 1/2" and allowed to dry. The stones are selected aesthetically and installed by applying an additional scratch coat completely to the back side of the stone and then firmly bedding the stone onto the wall. The stones are placed to create an average joint thickness of 1/2". Once the stone sets, the mortar is tuck-pointed using a mortar grout bag and the joints smoothed onto all lateral edges of the stone.

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.